

Nontechnical Descriptions  
Ponce Area, Puerto Rico Southern Part

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AaF2 - Adjuntas Clay, 40 To 60 Percent Slopes, Eroded

THE ADJUNTAS SERIES CONSISTS OF MODERATELY DEEP, WELL DRAINED SOILS ON UPLANDS. THEY FORMED IN MATERIAL WEATHERED FROM VOLCANIC ROCK. TYPICALLY THESE SOILS HAVE A DARK BROWN CLAY SURFACE LAYER 5 INCHES THICK. THE SUBSOIL FROM 5 TO 10 INCHES IS DARK BROWN AND STRONG BROWN CLAY FROM 10 TO 17 INCHES IS STRONG BROWN CLAY AND FROM 17 TO 24 INCHES IS YELLOW, WHITE, AND BROWNISH YELLOW CLAY. WEATHERED VOLCANIC ROCK IS AT 24 INCHES AND SEMICONSOLIDATED VOLCANIC ROCK IS AT 48 INCHES.

Adjuntas arcilloso, 40-60 por ciento de inclinacion. Suelo moderadamente profundo, bien drenado, muy fuertemente acido, textura fina, permeabilidad moderada, capacidad de retencion de agua moderada, suelo muy riscoso con erosion severa. Muy dificil de trabajar debido a la inclinacion y pegajosidad. La escorrentia es muy rapida y la fertilidad mediana.

AgD - Aguilera Gravelly Clay Loam, 12 To 20 Percent Slopes

THE AGUILERA SERIES CONSISTS OF SHALLOW, WELL DRAINED SOILS ON UPLANDS. THEY FORMED IN MATERIAL WEATHERED FROM LIMESTONE. TYPICALLY, THESE SOILS HAVE A VERY DARK GRAYISH BROWN AND LIGHT BROWNISH GRAY GRAVELLY CLAY LOAM SURFACE LAYER 6 INCHES THICK. THE MATERIAL FROM 6 TO 10 INCHES IS VERY DARK GRAYISH BROWN AND DARK GRAYISH BROWN VERY GRAVELLY CLAY LOAM. THE SUBSTRATUM FROM 10 TO 60 INCHES IS WHITE, SOFT LIMESTONE THAT TEXTURES TO LOAM.

Aguilera gravoso arcilloso lomico, 12-20 por ciento de inclinacion. Suelo poco profundo a la cal blanda, bien drenado, moderadamente alcalino, de textura moderadamente fina, permeabilidad moderada, capacidad de retencion de agua baja, moderadamente riscoso con alguna erosion. Este suelo tiene alrededor de 40 a 50 por ciento de piedra caliza dura a traves del perfil. La profundidad a la cal blanda varia entre 11 y 18 pulgadas. La escorrentia es mediana y son fertiles.

Nontechnical Descriptions  
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**AgF - Aguilita Gravelly Clay Loam, 20 To 60 Percent Slopes**

THE AGUILITA SERIES CONSISTS OF SHALLOW, WELL DRAINED SOILS ON UPLANDS. THEY FORMED IN MATERIAL WEATHERED FROM LIMESTONE. TYPICALLY, THESE SOILS HAVE A VERY DARK GRAYISH BROWN AND LIGHT BROWNISH GRAY GRAVELLY CLAY LOAM SURFACE LAYER 6 INCHES THICK. THE MATERIAL FROM 6 TO 10 INCHES IS VERY DARK GRAYISH BROWN AND DARK GRAYISH BROWN VERY GRAVELLY CLAY LOAM. THE SUBSTRATUM FROM 10 TO 60 INCHES IS WHITE, SOFT LIMESTONE THAT TEXTURES TO LOAM.

Aguilita gravoso arcilloso lomico, 20-60 por ciento de inclinacion. Suelo poco profundo a la cal blanda, bien drenado, moderadamente alcalino y de textura moderadamente fina. La permeabilidad es moderada, la capacidad de retencion de agua baja, riscosos a muy riscosos y con erosion moderada a severa. Este suelo tiene alrededor de 40-50 por ciento de piedra caliza dura grava en todos los perfiles. La profundidad a la cal blanda varia entre 11 y 18 pulgadas. La escorrentia es mediana y son fertiles.

**AhF - Aguilita Stony Clay Loam, 20 To 60 Percent Slopes**

THE AGUILITA SERIES CONSISTS OF SHALLOW, WELL DRAINED SOILS ON UPLANDS. THEY FORMED IN MATERIAL WEATHERED FROM LIMESTONE. TYPICALLY, THESE SOILS HAVE A VERY DARK GRAYISH BROWN AND LIGHT BROWNISH GRAY GRAVELLY CLAY LOAM SURFACE LAYER 6 INCHES THICK. THE MATERIAL FROM 6 TO 10 INCHES IS VERY DARK GRAYISH BROWN AND DARK GRAYISH BROWN VERY GRAVELLY CLAY LOAM. THE SUBSTRATUM FROM 10 TO 60 INCHES IS WHITE, SOFT LIMESTONE THAT TEXTURES TO LOAM.

Aguilita pedregoso arcilloso lomico, 20-60 por ciento de inclinacion. Suelo poco profundo a la cal blanda, bien drenado, moderadamente alcalino, de textura moderadamente fina, permeabilidad moderada, la capacidad de retencion de agua baja, muy riscoso y con erosion severa. Este suelo tiene alrededor de 40 a 60 por ciento de la superficie cubierta por piedras y rocas. La profundidad a la cal blanda varia entre 11 y 18 pulgadas. La escorrentia es rapida a muy rapida y la erosion es un peligro.

Nontechnical Descriptions  
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AnE2 - Alonso Clay, 20 To 40 Percent Slopes, Eroded

THE ALONSO SERIES CONSISTS OF VERY DEEP, WELL DRAINED SOILS ON UPLANDS. THEY FORMED IN MATERIAL WEATHERED FROM VOLCANIC ROCKS. TYPICALLY THESE SOILS HAVE A DARK REDDISH BROWN CLAY SURFACE LAYER 6 INCHES THICK. THE SUBSOIL FROM 6 TO 16 INCHES IS DUSKY RED CLAY AND FROM 16 TO 53 INCHES IS DARK REDDISH BROWN CLAY. THE SUBSTRATUM FROM 53 TO 60 INCHES IS CLAY SAPROLITE.

Alonso arcilloso, 20-40 por ciento de inclinacion, erodado. Suelo profundo, bien drenado, muy fuertemente acido, textura fina y permeabilidad moderada. La capacidad de retencion de agua alta, riscoso, con erosion moderada, fertilidad moderada y algo dificil de trabajar debido a la pegajosidad. La escorrentia es rapida.

AnF2 - Alonso Clay, 40 To 60 Percent Slopes, Eroded

THE ALONSO SERIES CONSISTS OF VERY DEEP, WELL DRAINED SOILS ON UPLANDS. THEY FORMED IN MATERIAL WEATHERED FROM VOLCANIC ROCKS. TYPICALLY THESE SOILS HAVE A DARK REDDISH BROWN CLAY SURFACE LAYER 6 INCHES THICK. THE SUBSOIL FROM 6 TO 16 INCHES IS DUSKY RED CLAY AND FROM 16 TO 53 INCHES IS DARK REDDISH BROWN CLAY. THE SUBSTRATUM FROM 53 TO 60 INCHES IS CLAY SAPROLITE.

Alonso arcilloso, 40-60 por ciento de inclinacion. Suelo profundo, bien drenado, muy fuertemente acido, textura fina y permeabilidad moderada. La capacidad de retencion de agua moderada, riscoso y con erosion moderada. Tienen fertilidad moderada y son dificiles de trabajar debido a lo inclinado del terreno. La escorrentia es muy rapida.

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**CbF2 - Caguabo Gravelly Clay Loam, 20 To 60 Percent Slopes, Eroded**

THE CAGUABO SERIES CONSISTS OF SHALLOW WELL DRAINED SOILS ON UPLANDS. THEY FORMED IN MATERIAL WEATHERED FROM VOLCANIC ROCKS. TYPICALLY THESE SOILS HAVE A DARK GRAYISH BROWN CLAY LOAM SURFACE LAYER 4 INCHES THICK. THE SUBSOIL FROM 4 TO 10 INCHES IS BROWN VERY GRAVELLY CLAY LOAM. WEATHERED ROCK FRAGMENTS ARE AT 10 TO 16 INCHES. CONSOLIDATED VOLCANIC ROCK IS AT 16 INCHES.

Caguabo gravoso arcilloso lomico, 20-60 por ciento de inclinacion, erodado. Suelo poco profundo a la roca volcanica dura, bien drenado, neutral y textura moderadamente fina. La permeabilidad es moderada y la capacidad de retencion de agua baja. La escorrentia es rapida a muy rapida y los suelos son susceptibles a erosion. Son riscosos a muy riscosos y la profundidad a la roca semiconsolidada esta entre 12 a 20 pulgadas.

**CdF - Caguabo-Rock Land Complex, 20 To 60 Percent Slopes**

ROCK OUTCROP CONSISTS OF EXPOSURES OF BARE, HARD BEDROCK.  
THE CAGUABO SERIES CONSISTS OF SHALLOW WELL DRAINED SOILS ON UPLANDS. THEY FORMED IN MATERIAL WEATHERED FROM VOLCANIC ROCKS. TYPICALLY THESE SOILS HAVE A DARK GRAYISH BROWN CLAY LOAM SURFACE LAYER 4 INCHES THICK. THE SUBSOIL FROM 4 TO 10 INCHES IS BROWN VERY GRAVELLY CLAY LOAM. WEATHERED ROCK FRAGMENTS ARE AT 10 TO 16 INCHES. CONSOLIDATED VOLCANIC ROCK IS AT 16 INCHES.

Complejo Caguabo-estrato rocoso, 20-60 por ciento de inclinacion. Este complejo consiste de alrededor de 60 por ciento de suelo Caguabo y 40 por ciento de estrato rocoso. El estrato rocoso consiste de areas donde la roca volcanica, los penascos y los guijarros cubren del 90 al 100 de la superficie.

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**CoD - Callabo Silty Clay Loam, 12 To 20 Percent Slopes**

THE CALLABO SERIES CONSISTS OF MODERATELY DEEP, WELL DRAINED SOIL ON SIDESLOPES AND RIDGES. THEY FORMED IN LOAMY MATERIALS DERIVED FROM VOLCANIC ROCKS. TYPICALLY, THEY HAVE A VERY DARK GRAYISH BROWN SILTY CLAY LOAM SURFACE LAYER 5 INCHES THICK. THE SUBSOIL FROM 5 TO 13 INCHES IS DARK GRAYISH BROWN SILTY CLAY LOAM. THE SUBSOIL FROM 13 TO 19 INCHES IS DARK YELLOWISH BROWN CLAY LOAM. THE SUBSTRATUM FROM 19 TO 27 INCHES IS WEATHERED VOLCANIC ROCK. SEMICONSOLIDATED VOLCANIC ROCK IS AT 27 INCHES.

Callabo limo arcilloso lomico, 12-20 por ciento de inclinacion. Suelo moderadamente profundo a la roca volcanica, bien drenado, ligeramente acido a neutro y textura moderadamente fina. La permeabilidad es moderada y la capacidad de retencion de agua baja. El contenido de materia organica es alta en la superficie. La escorrentia es moderada a muy rapida. Son suelos moderadamente riscosos y fertiles. La profundidad a la roca semiconsolidada varia de 20 a 36 pulgadas.

**CoE - Callabo Silty Clay Loam, 20 To 40 Percent Slopes**

THE CALLABO SERIES CONSISTS OF MODERATELY DEEP, WELL DRAINED SOIL ON SIDESLOPES AND RIDGES. THEY FORMED IN LOAMY MATERIALS DERIVED FROM VOLCANIC ROCKS. TYPICALLY, THEY HAVE A VERY DARK GRAYISH BROWN SILTY CLAY LOAM SURFACE LAYER 5 INCHES THICK. THE SUBSOIL FROM 5 TO 13 INCHES IS DARK GRAYISH BROWN SILTY CLAY LOAM. THE SUBSOIL FROM 13 TO 19 INCHES IS DARK YELLOWISH BROWN CLAY LOAM. THE SUBSTRATUM FROM 19 TO 27 INCHES IS WEATHERED VOLCANIC ROCK. SEMICONSOLIDATED VOLCANIC ROCK IS AT 27 INCHES.

Callabo limo arcilloso lomico, 20-40 por ciento de inclinacion. Suelo moderadamente profundo a la roca volcanica, bien drenado, ligeramente acido a neutral y de textura moderadamente fina. La permeabilidad es moderada y la capacidad de retencion de agua es baja. La escorrentia es rapida, el contenido de materia organica en la superficie es alto y son riscosos. La profundidad a la roca semiconsolidada varia de 20 a 36 pulgadas.

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CoF2 - Callabo Silty Clay Loam, 40 To 60 Percent Slopes Eroded

THE CALLABO SERIES CONSISTS OF MODERATELY DEEP, WELL DRAINED SOIL ON SIDESLOPES AND RIDGES. THEY FORMED IN LOAMY MATERIALS DERIVED FROM VOLCANIC ROCKS. TYPICALLY, THEY HAVE A VERY DARK GRAYISH BROWN SILTY CLAY LOAM SURFACE LAYER 5 INCHES THICK. THE SUBSOIL FROM 5 TO 13 INCHES IS DARK GRAYISH BROWN SILTY CLAY LOAM. THE SUBSOIL FROM 13 TO 19 INCHES IS DARK YELLOWISH BROWN CLAY LOAM. THE SUBSTRATUM FROM 19 TO 27 INCHES IS WEATHERED VOLCANIC ROCK. SEMICONSOLIDATED VOLCANIC ROCK IS AT 27 INCHES.

Callabo limo arcilloso lomico, 40 a 60 por ciento de inclinacion, erodado. Suelo moderadamente profundo a la roca volcanica, bien drenado, ligeramente acido a neutro y de textura moderadamente fina. La permeabilidad es moderada y la capacidad de retencion de agua es baja. Son muy riscosos, con escorrentia muy rapida y peligro de erosion. La profundidad a la roca semiconsolidada varia de 20 a 36 pulgadas.

Cr - Cintrona Clay

THE CINTRONA SERIES CONSISTS OF VERY DEEP, POORLY DRAINED SOILS ON FLOOD PLAINS. THEY FORMED IN CLAYEY SEDIMENTS DERIVED FROM VOLCANIC AND LIMESTONE ROCKS. TYPICALLY, THESE SOILS HAVE VERY DARK GRAY CLAY SURFACE LAYER 8 INCHES THICK. THE SUBSOIL FROM 8 TO 24 INCHES IS DARK GRAY CLAY. THE SUBSOIL FROM 24 TO 31 INCHES IS VERY DARK GRAYISH BROWN CLAY. THE SUBSTRATUM FROM 32 TO 60 INCHES IS DARK GREENISH GRAY, GREENISH GRAY, DARK GRAY, VERY DARK GRAY, AND YELLOWISH BROWN CLAY. SLOPES RANGE FROM 0 TO 2 PERCENT.

Cintrona arcilloso. Suelo profundo, algo mal drenado, calizo y de textura fina. La permeabilidad es lenta, la capacidad de retencion de agua alta, casi llanos y sin erosion. Son dificiles de trabajar debido a la pegajosidad. Son fertiles y su contenido de materia organica es alto. La profundidad del nivel freatico varia de 36 a 60 pulgadas drenado. La escorrentia es lenta. Son dificiles de trabajar.

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Ct - Constancia Silty Clay

THE CONSTANCIA SERIES CONSISTS OF VERY DEEP, SOMEWHAT POORLY DRAINED SOILS ON FLOOD PLAINS. THEY FORMED IN CLAYEY SEDIMENTS DERIVED FROM VOLCANIC AND LIMESTONE ROCKS. TYPICALLY, THESE SOILS HAVE A VERY DARK GRAYISH BROWN SILTY CLAY SURFACE LAYER, 12 INCHES THICK. THE SUBSOIL FROM 12 TO 29 INCHES IS VERY, DARK GRAYISH BROWN SILTY CLAY. THE SUBSTRATUM FROM 29 TO 50 INCHES IS DARK GRAY CLAY, AND FROM 30 INCHES TO 65 INCHES IS YELLOWISH BROWN, DARK GRAY, DARK BLUISH GRAY, AND BROWNISH YELLOW CLAY. SLOPES RANGE FROM 0 TO 2 PERCENT.

Constancia limo arcilloso. Suelo profundo, algo mal drenado, calizo, textura fina, permeabilidad lenta y capacidad de retencion de agua de moderada a alta. Suelo casi llano sin erosion, fertil y muy dificil de trabajar debido a la pegajosidad. El contenido de materia organica es alto. La profundidad del nivel freatico varia de 36 a 60 pulgadas despues de drenado. La escorrentia es lenta.

CuF2 - Consumo Clay, 40 To 60 Percent Slopes, Eroded

CONSUMO SERIES CONSISTS OF VERY DEEP, WELL DRAINED SOILS ON UPLANDS. THEY FORMED IN MATERIAL WEATHERED FROM VOLCANIC ROCK. TYPICALLY THESE SOILS HAVE A REDDISH BROWN CLAY SURFACE LAYER 6 INCHES THICK. THE SUBSOIL FROM 6 TO 14 INCHES IS RED CLAY AND FROM 14 TO 20 INCHES IS RED SILTY CLAY. THE SUBSTRATUM FROM 20 TO 60 INCHES IS RED, YELLOW, BROWN, AND LIGHT GRAY SILTY CLAY LOAM SAPROLITE.

Consumo arcilloso, 40-60 por ciento de inclinacion. Suelo profundo, bien drenado, muy fuertemente acido, textura fina, permeabilidad moderada, capacidad de retencion de agua alta, suelo muy riscoso con erosion moderada, ligeramente fertil y dificil de trabajar debido a lo inclinado del terreno. La escorrentia es muy rapida. Los deslizamientos son comunes.

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Cx - Cortada Silty Clay Loam

THE CORTADA SERIES CONSISTS OF VERY DEEP, WELL DRAINED SOILS ON FLOODPLAINS. THEY FORMED IN STRATIFIED LOAMY SEDIMENTS DERIVED FROM VOLCANIC ROCKS AND LIMESTONE. TYPICALLY, THESE SOILS HAVE A VERY DARK GRAYISH BROWN SILTY CLAY LOAM SURFACE LAYER, 10 INCHES THICK. THE SUBSOIL FROM 10 TO 28 INCHES IS DARK BROWN SILTY CLAY LOAM. THE SUBSTRATUM FROM 28 TO 38 INCHES IS BROWN SILT LOAM. FROM 38 TO 68 IS SILTY CLAY LOAM. SLOPES RANGE FROM 0 TO 2 PERCENT.

Cortada limo arcilloso lomico. Suelo profundo, bien drenado, calizo, textura moderadamente fina y de permeabilidad moderada. La capacidad de retencion de agua es moderada y el contenido de materia organica es alto. La escorrentia es lenta. Suelo casi llano con ninguna o poca erosion, fertil y facil de trabajar. El carbonato calizo aumenta con la profundidad.

CyB - Cuyon Loam, 0 To 5 Percent Slopes

THE CUYON SERIES CONSISTS OF SHALLOW TO SAND AND GRAVEL, EXCESSIVELY DRAINED SOILS ON TERRACES. THEY FORMED IN STRATIFIED COARSE TEXTURED SEDIMENTS OF MIXED ORIGIN. TYPICALLY, THESE SOILS HAVE A DARK BROWN LOAM SURFACE LAYER, 11 INCHES THICK. THE LAYER FROM 11 TO 60 INCHES IS STRATIFIED COARSE GRAVEL, COARSE SAND, AND SILT.

Cuyon lomico, 0-5 por ciento de inclinacion. Suelo muy poco profundo a la grava o arena, excesivamente drenado, neutral, textura mediana, permeabilidad rapida, capacidad de retencion de agua baja, suavemente inclinado y sin erosion. La profundidad a la grava o arena aparece de 8 a 12 pulgadas. La escorrentia es lenta. Suelo fertil y facil de trabajar.

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**DaD - Daguey Clay, 12 To 20 Percent Slopes**

THE DAGUEY SERIES CONSISTS OF VERY DEEP, WELL DRAINED SOILS ON UPLANDS. THEY FORMED IN MATERIAL WEATHERED FROM VOLCANIC ROCK. TYPICALLY THESE SOILS HAVE A BROWN CLAY SURFACE LAYER 10 INCHES THICK. A SUBSURFACE LAYER FROM 10 TO 14 INCHES IS REDDISH BROWN CLAY. THE SUBSOIL FROM 14 TO 23 INCHES IS YELLOWISH RED CLAY AND FROM 23 TO 72 INCHES IS RED CLAY. THE SUBSTRATUM FROM 72 TO 90 INCHES IS YELLOWISH RED SILTY CLAY LOAM.

Daguey arcilloso, 12-20 por ciento de inclinacion. Suelos profundos, moderadamente bien drenados, fuertemente acidos, textura fina, permeabilidad moderada y capacidad de retencion de agua de moderada a alta. Son de fuertemente inclinados a moderadamente riscosos y algo susceptibles a erosion. El contenido de materia organica es moderada. Son dificiles de trabajar por su alto contenido de arcilla. La escorrentia es moderada. Su fertilidad es mediana.

**EnC - Ensenada Gravelly Clay, 2 To 12 Percent Slopes**

THE ENSENADA SERIES CONSISTS OF VERY DEEP, WELL DRAINED SOILS ON FOOTSLOPES AND IN VALLEYS. THEY FORMED IN FLUVIAL DEPOSITS WHICH CONTAIN LIMESTONE FRAGMENTS. TYPICALLY, THESE SOILS HAVE DARK REDDISH BROWN GRAVELLY CLAY SURFACE AND SUBSOIL LAYERS TO 11 INCHES. THE UNDERLYING LAYER TO 60 INCHES IS YELLOWISH RED GRAVELLY CLAY.

Ensenada gravoso arcilloso, 2-12 por ciento de inclinacion. Suelo profundo, bien drenados, calizo, de textura fina, permeabilidad moderada, capacidad de retencion de agua de baja a moderada, fertilidad natural alta, suavemente a fuertemente inclinados y susceptibles a erosion. Son dificiles de trabajar debido a la gran cantidad de grava a traves del perfil. La escorrentia es lenta.

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Fe - Fe Clay

THE FE SERIES CONSISTS OF VERY DEEP, SOMEWHAT POORLY DRAINED SOILS ON ALLUVIAL FANS. THEY FORMED IN CLAYEY SEDIMENTS DERIVED FROM VOLCANIC ROCKS AND LIMESTONE. TYPICALLY, THESE SOILS HAVE A DARK REDDISH BROWN, CLAY SURFACE LAYER 7 INCHES THICK. THE SUBSURFACE LAYER FROM 7 TO 17 INCHES IS DARK REDDISH BROWN CLAY. THE SUBSTRATUM FROM 17 TO 28 INCHES IS DARK REDDISH BROWN CLAY. THE SUBSTRATUM FROM 28 TO 56 INCHES IS DARK REDDISH GRAY CLAY. SLOPES RANGE FROM 0 TO 2 PERCENT.

Fe arcilloso, 0-2 por ciento de inclinacion. Suelos profundos, algo mal drenados, calizos, salinos, de textura fina, moderadamente alcalinos a muy fuertemente alcalinos, permeabilidad lenta y capacidad de retencion de agua alta. Casi planos y sin erosion. Son dificiles de trabajar. La escorrentia es lenta.

FtB - Fraternidad Clay, 2 To 5 Percent Slopes

THE FRATERNIDAD SERIES CONSISTS OF VERY DEEP, MODERATELY WELL DRAINED SOILS ON COASTAL PLAINS. THEY FORMED IN SEDIMENTS DERIVED FROM VOLCANIC ROCKS AND LIMESTONE. TYPICALLY, THESE SOILS HAVE VERY DARK GRAYISH BROWN CLAY SURFACE AND SUBSURFACE LAYERS 11 INCHES THICK. THE SUBSTRATUM FROM 11 INCHES TO 60 INCHES IS BROWN CLAY.

Fraternidad arcilloso, 2-5 por ciento de inclinacion. Suelos profundos, moderadamente bien drenados, neutrales a suavemente alcalinos, de textura fina, permeabilidad lenta, escorrentia es lenta y la capacidad de retencion de agua alta. Suavemente inclinado y sin erosion. La fertilidad natural es alta. Estos suelos son muy dificiles de trabajar.

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FtC2 - Fraternidad Clay, 5 To 12 Percent Slopes, Eroded

THE FRATERNIDAD SERIES CONSISTS OF VERY DEEP, MODERATELY WELL DRAINED SOILS ON COASTAL PLAINS. THEY FORMED IN SEDIMENTS DERIVED FROM VOLCANIC ROCKS AND LIMESTONE. TYPICALLY, THESE SOILS HAVE VERY DARK GRAYISH BROWN CLAY SURFACE AND SUBSURFACE LAYERS 11 INCHES THICK. THE SUBSTRATUM FROM 11 INCHES TO 60 INCHES IS BROWN CLAY.

Fraternidad arcilloso, 5-12 por ciento de inclinacion, erodado. Suelos profundos, moderadamente bien drenados, neutrales a suavemente alcalinos, de textura fina, permeabilidad lenta, escorrentia lenta a mediana y capacidad de retencion de agua alta. Son fuertemente inclinado y susceptibles a erosion. La fertilidad natural es alta. Estos suelos son muy dificiles de trabajar.

GoF - Guanabano Clay, 40 To 60 Percent Slopes

THE GUANABANO SERIES CONSISTS OF VERY DEEP, WELL DRAINED SOILS ON UPLANDS. THEY FORMED IN MATERIALS WEATHERED FROM VOLCANIC ROCKS. THESE SOILS HAVE A DARK REDDISH BROWN CLAY SURFACE LAYER 6 INCHES THICK. THE SUBSOIL FROM 6 TO 11 INCHES, IS DARK REDDISH BROWN CLAY. THE SUBSOIL, FROM 11 TO 20 INCHES, IS REDDISH BROWN SILTY CLAY LOAM. THE SUBSTRATUM, FROM 20 TO 50 INCHES, IS REDDISH BROWN SILTY CLAY LOAM, AND, FROM 50 TO 60 INCHES, IS REDDISH GRAY GRAVELLY SILTY CLAY LOAM.

Guanabano arcilloso, 40-60 por ciento de inclinacion. Suelo profundo a la roca volcanica dura, bien drenado, calizo, de permeabilidad moderada y capacidad de retencion de agua alta. La escorrentia es muy rapida, son fertiles, riscosos a muy riscosos y susceptibles a erosion.

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HmE2 - Humatas Clay, 20 To 40 Percent Slopes, Eroded

THE HUMATAS SERIES CONSISTS OF VERY DEEP, WELL DRAINED SOILS ON UPLANDS. THEY FORMED IN MATERIAL WEATHERED FROM VOLCANIC ROCK. TYPICALLY THESE SOILS HAVE A DARK BROWN CLAY SURFACE LAYER 4 INCHES THICK. THE SUBSOIL FROM 4 TO 9 INCHES IS YELLOWISH RED CLAY, FROM 9 TO 25 INCHES IS RED CLAY, AND FROM 25 TO 60 INCHES IS RED SILTY CLAY LOAM SAPROLITE.

Humatas arcilloso, 20-40 por ciento de inclinacion, erodado. Suelos profundos, bien drenados, muy fuertemente acidos, textura fina, riscosos, permeabilidad y erosión moderada. La capacidad de retención de agua es de mediana a alta y la fertilidad es moderada. La escorrentía es rápida.

HmF2 - Humatas Clay, 40 To 60 Percent Slopes, Eroded

THE HUMATAS SERIES CONSISTS OF VERY DEEP, WELL DRAINED SOILS ON UPLANDS. THEY FORMED IN MATERIAL WEATHERED FROM VOLCANIC ROCK. TYPICALLY THESE SOILS HAVE A DARK BROWN CLAY SURFACE LAYER 4 INCHES THICK. THE SUBSOIL FROM 4 TO 9 INCHES IS YELLOWISH RED CLAY, FROM 9 TO 25 INCHES IS RED CLAY, AND FROM 25 TO 60 INCHES IS RED SILTY CLAY LOAM SAPROLITE.

Humatas arcilloso, 40-60 por ciento de inclinación. Suelos profundos, bien drenados, muy fuertemente acidos, textura fina, muy riscosos, permeabilidad y erosión moderada. La capacidad de retención de agua es de mediana a alta y la fertilidad es moderada. La escorrentía es muy rápida.

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HxF - Humatas Complex, 20 To 60 Percent Slopes

THE HUMATAS SERIES CONSISTS OF VERY DEEP, WELL DRAINED SOILS ON UPLANDS. THEY FORMED IN MATERIAL WEATHERED FROM VOLCANIC ROCK. TYPICALLY THESE SOILS HAVE A DARK BROWN CLAY SURFACE LAYER 4 INCHES THICK. THE SUBSOIL FROM 4 TO 9 INCHES IS YELLOWISH RED CLAY, FROM 9 TO 25 INCHES IS RED CLAY, AND FROM 25 TO 60 INCHES IS RED SILTY CLAY SAPROLITE.

Complejo Humatas, 20-60 por ciento de inclinacion. Esta unidad consiste de alrededor de 30 por ciento suelo Humatas y 70 por ciento de estrato rocoso que son demasiados variables para clasificar.

Hy - Hydraquents

HYDRAQUENTS ARE VERY DEEP, VERY POORLY DRAINED SOILS IN LAGOON-LIKE AREAS AND DEPRESSIONS ON FLOOD PLAINS. SLOPES RANGE FROM 0 TO 2 PERCENT.

Terrenos aluviales pantanosos. Esta unidad cartografica consiste de depresiones en los llanos aluviales de quebradas y rios. El nivel freatico esta en o cerca de la superficie durante casi todo el año.

Hz - Hydraquents, Saline

HYDRAQUENTS CONSIST OF VERY DEEP, VERY POORLY DRAINED SOILS ALONG THE COAST. THEY ARE FLOODED MOST OF THE YEAR. SLOPES RANGE FROM 0 TO 2 PERCENT.

Terrenos pantanosos de mangle, salinos. Esta unidad cartografica consiste de depresiones en los llanos aluviales de rios en el area semiarida. Estos suelos son salinos. El nivel freatico esta en o cerca de la superficie todo el año.

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Jg - Jacaguas Silty Clay Loam

THE JACAGUAS SERIES CONSISTS OF VERY DEEP, EXCESSIVELY DRAINED SOILS ON FLOODPLAINS. THEY FORMED IN STRATIFIED SEDIMENTS DERIVED FROM VOLCANIC AND LIMESTONE ROCKS. TYPICALLY, THESE SOILS HAVE A VERY DARK BROWN, SILTY CLAY LOAM SURFACE LAYER 8 INCHES THICK. THE SUBSOIL, FROM 8 TO 16 INCHES, IS VERY DARK GRAYISH BROWN, GRAVELLY CLAY LOAM. THE SUBSTRATUM, FROM 16 TO 60 INCHES, IS DARK YELLOWISH BROWN VERY COBBLY LOAM. SLOPES RANGE FROM 0 TO 2 PERCENT.

Jacaguas limo arcilloso lomico, 0-2 por ciento de inclinacion. Suelo poco profundo a la arena o grava, bien drenado, neutral y de textura moderadamente fina. La permeabilidad es moderada en la superficie y en el subsuelo y rapida en el sustrato. La capacidad de retencion de agua es moderada, la escorrentia lenta, casi planos y sin erosion. La fertilidad natural es alta y son faciles de trabajar. La escorrentia es lenta.

JnC - Jacana Clay, 5 To 12 Percent Slopes

THE JACANA SERIES CONSISTS OF MODERATELY DEEP, WELL DRAINED SOILS ON ALLUVIAL FANS, FOOTSLOPES AND HILLS. THEY FORMED IN CLAYEY MATERIALS WEATHERED FROM VOLCANIC ROCKS. TYPICALLY, THESE SOILS HAVE VERY DARK BROWN, CLAY SURFACE LAYERS 6 INCHES THICK. THE LAYER FROM 6 TO 21 INCHES IS DARK BROWN, CLAY. THE LAYER FROM 21 TO 28 INCHES IS SANDY CLAY LOAM AND CLAY LOAM. BELOW IS SEMICONSOLIDATED VOLCANIC ROCK.

Jacana arcilloso, 5-12 por ciento de inclinacion. Suelo moderadamente profundo a la roca volcanica, bien drenado, medianamente alcalino, de textura fina, permeabilidad moderadamente lenta y capacidad de retencion de agua moderada. Son fuertemente inclinados y susceptibles a erosion. La fertilidad natural es alta. Estos suelos son dificiles de trabajar por la pegajosidad de la arcilla. El contenido de materia organico es alto. La escorrentia es moderada.

Nontechnical Descriptions  
Ponce Area, Puerto Rico Southern Part

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JzD - Juana Diaz Clay Loam, 12 To 20 Percent Slopes

THE JUANA DIAZ SERIES CONSISTS OF SHALLOW, WELL DRAINED, SOILS ON SIDESLOPES AND HILLTOPS. THEY FORMED IN MATERIALS DERIVED FROM SANDSTONE. TYPICALLY, THESE SOILS HAVE A DARK YELLOWISH BROWN AND DARK BROWN CLAY LOAM SURFACE LAYER 6 INCHES THICK. THE SUBSOIL FROM 6 TO 12 INCHES IS DARK YELLOWISH BROWN CLAY LOAM AND FROM 12 TO 18 INCHES IS YELLOWISH BROWN SILT LOAM. SEMICONSOLIDATED SANDSTONE IS AT 18 INCHES.

Juana Diaz arcilloso lomico, 12-20 por ciento de inclinacion. Suelo moderadamente profundo a la roca volcanica, bien drenado, neutral a suavemente alcalino y textura mediana a moderadamente fina. La permeabilidad es moderada y la capacidad de retencion de agua baja. Los suelos moderadamente riscosos y susceptibles a erosión. La fertilidad natural es moderada. La escorrentia es moderada. Son faciles de trabajar.

JzE - Juana Diaz Clay Loam, 20 To 40 Percent Slopes

THE JUANA DIAZ SERIES CONSISTS OF SHALLOW, WELL DRAINED, SOILS ON SIDESLOPES AND HILLTOPS. THEY FORMED IN MATERIALS DERIVED FROM SANDSTONE. TYPICALLY, THESE SOILS HAVE A DARK YELLOWISH BROWN AND DARK BROWN CLAY LOAM SURFACE LAYER 6 INCHES THICK. THE SUBSOIL FROM 6 TO 12 INCHES IS DARK YELLOWISH BROWN CLAY LOAM AND FROM 12 TO 18 INCHES IS YELLOWISH BROWN SILT LOAM. SEMICONSOLIDATED SANDSTONE IS AT 18 INCHES.

Juana Diaz arcilloso lomico, 20-40 por ciento de inclinacion. Suelo moderadamente profundo a la roca volcanica, bien drenado, neutral a medianamente alcalino y de textura mediana a moderadamente fina. La permeabilidad es moderada y la capacidad de retencion de agua es baja. Son riscosos, con fertilidad natural moderada, escorrentia rapida y erosivos. Son faciles de trabajar.

Nontechnical Descriptions  
Ponce Area, Puerto Rico Southern Part

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LeC - Lares Clay, 5 To 12 Percent Slopes

THE LARES SERIES CONSISTS OF VERY DEEP, SOMEWHAT POORLY DRAINED SOILS ON TERRACES. THEY FORMED IN SEDIMENTS DERIVED FROM WEATHERED VOLCANIC ROCKS. TYPICALLY THESE SOILS HAVE A BROWN SILTY CLAY SURFACE LAYER 9 INCHES THICK. THE CLAY SUBSOIL LAYERS FROM 9 TO 45 INCHES ARE LIGHT YELLOWISH BROWN, GRAYISH BROWN, AND YELLOWISH BROWN. THE SUBSTRATUM FROM 45 TO 71 INCHES IS WEATHERED ROCK FRAGMENTS OF CLAY TEXTURE.

Lares arcilloso, 5-12 por ciento de inclinacion. Suelo profundo, moderadamente bien drenado, fuertemente acido, de textura fina, permeabilidad moderada, capacidad de retencion de agua moderada, fertilidad natural mediana y algo dificil de trabajar debido a la pegajosidad. La escorrentia es moderada.

LmF2 - Lirios Clay Loam, 40 To 60 Percent Slopes, Eroded

THE LIRIOS SERIES CONSISTS OF VERY DEEP, WELL DRAINED SOILS ON UPLANDS. THEY FORMED IN MATERIAL WEATHERED FROM VOLCANIC ROCKS. TYPICALLY THESE SOILS HAVE A DARK BROWN SILTY CLAY LOAM SURFACE LAYER 4 INCHES THICK. THE SUBSOIL FROM 4 TO 14 INCHES IS RED CLAY AND FROM 14 TO 23 INCHES IS RED SILTY CLAY. THE SUBSTRATUM FROM 23 TO 60 INCHES IS RED, STRONG BROWN, REDDISH BROWN, AND PINK SILTY CLAY LOAM SAPROLITE.

Lirios arcilloso lomico, 40-60 por ciento de inclinacion, erodado. Suelo profundo, bien drenado, textura moderadamente fina, muy riscoso, muy fuertemente acido, permeabilidad moderada y la capacidad de retencion de agua moderada. La escorrentia es muy rapida y la fertilidad moderada. Son susceptibles a erosion.

Nontechnical Descriptions  
Ponce Area, Puerto Rico Southern Part

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**LnB - Llanos Clay, 2 To 5 Percent Slopes**

THE LLANOS SERIES CONSISTS OF VERY DEEP, WELL DRAINED SOILS ON FOOT SLOPES AND ALLUVIAL FANS. THEY FORMED IN CLAYEY OVER LOAMY SEDIMENTS DERIVED FROM VOLCANIC ROCKS. TYPICALLY THESE SOILS HAVE A VERY DARK BROWN AND BLACK CLAY SURFACE AND SUBSURFACE LAYER 15 INCHES THICK. THE SUBSOIL FROM 15 TO 29 INCHES IS DARK BROWN CLAY. THE SUBSTRATUM IS DARK BROWN CLAY LOAM, SANDY CLAY LOAM, SANDY LOAM OR LOAMY SAND.

Llanos arcilloso, 2-5 por ciento de inclinacion. Suelo profundo, bien drenado, neutral a suavemente alcalino, de textura fina, permeabilidad moderadamente lenta, capacidad de retencion de agua alta, fertiles y dificiles de trabajar. Son suavemente inclinados y sin erosjon. El contenido de materia organica es alto. La escorrentia es lenta.

**LnC2 - Llanos Clay, 5 To 12 Percent Slopes, Eroded**

THE LLANOS SERIES CONSISTS OF VERY DEEP, WELL DRAINED SOILS ON FOOT SLOPES AND ALLUVIAL FANS. THEY FORMED IN CLAYEY OVER LOAMY SEDIMENTS DERIVED FROM VOLCANIC ROCKS. TYPICALLY THESE SOILS HAVE A VERY DARK BROWN AND BLACK CLAY SURFACE AND SUBSURFACE LAYER 15 INCHES THICK. THE SUBSOIL FROM 15 TO 29 INCHES IS DARK BROWN CLAY. THE SUBSTRATUM IS DARK BROWN CLAY LOAM, SANDY CLAY LOAM, SANDY LOAM OR LOAMY SAND.

Llanos arcilloso, 5-12 por ciento de inclinacion, erodado. Suelo profundo, bien drenado, neutral a suavemente alcalino, de textura fina, permeabilidad moderadamente lenta, capacidad de retencion de agua alta, fertil y dificil de trabajar. El contenido de materia organico es alto. Son fuertemente inclinados y susceptibles a erosjon. La escorrentia es moderada.

Nontechnical Descriptions  
Ponce Area, Puerto Rico Southern Part

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LuE - Los Guineos Clay, 20 To 40 Percent Slopes

THE LOS GUINEOS SERIES CONSISTS OF VERY DEEP, MODERATELY WELL DRAINED SOILS ON UPLANDS. THEY FORMED IN MATERIAL WEATHERED FROM VOLCANIC ROCKS. TYPICALLY THESE SOILS HAVE A BROWN SILTY CLAY LOAM SURFACE LAYER 5 INCHES THICK. THE CLAY SUBSOIL FROM 5 TO 15 INCHES IS YELLOWISH BROWN, FROM 15 TO 24 INCHES IS REDDISH YELLOW, FROM 24 TO 34 INCHES IS RED AND STRONG BROWN, AND FROM 34 TO 48 INCHES IS RED AND REDDISH YELLOW. THE SUBSTRATUM FROM 48 TO 60 INCHES IS CLAY SAPROLITE.

Los Guineos arcilloso, 20-40 por ciento de inclinacion. Suelo profundo, moderadamente bien drenado, textura fina, riscoso, muy fuertemente acido, con permeabilidad y capacidad retencion de agua de moderada a alta. La escorrentia es rapida y la fertilidad es baja.

LuF - Los Guineos Clay, 40 To 60 Percent Slopes

THE LOS GUINEOS SERIES CONSISTS OF VERY DEEP, MODERATELY WELL DRAINED SOILS ON UPLANDS. THEY FORMED IN MATERIAL WEATHERED FROM VOLCANIC ROCKS. TYPICALLY THESE SOILS HAVE A BROWN SILTY CLAY LOAM SURFACE LAYER 5 INCHES THICK. THE CLAY SUBSOIL FROM 5 TO 15 INCHES IS YELLOWISH BROWN, FROM 15 TO 24 INCHES IS REDDISH YELLOW, FROM 24 TO 34 INCHES IS RED AND STRONG BROWN, AND FROM 34 TO 48 INCHES IS RED AND REDDISH YELLOW. THE SUBSTRATUM FROM 48 TO 60 INCHES IS CLAY SAPROLITE.

Los Guineos arcilloso, 40-60 por ciento de inclinacion. Suelo profundo, moderadamente bien drenado, textura fina, muy riscoso, muy fuertemente acido, con permeabilidad y capacidad de retencion de agua de moderada a alta . La escorrentia es muy rapida y la fertilidad es baja.

Nontechnical Descriptions  
Ponce Area, Puerto Rico Southern Part

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**LyFX - Los Guineos-Maricao Association, Steep**

THE LOS GUINEOS SERIES CONSISTS OF VERY DEEP, MODERATELY WELL DRAINED SOILS ON UPLANDS. THEY FORMED IN MATERIAL WEATHERED FROM VOLCANIC ROCKS. TYPICALLY THESE SOILS HAVE A BROWN SILTY CLAY LOAM SURFACE LAYER 5 INCHES THICK. THE CLAY SUBSOIL FROM 5 TO 15 INCHES IS YELLOWISH BROWN, FROM 15 TO 24 INCHES IS REDDISH YELLOW, FROM 24 TO 34 INCHES IS RED AND STRONG BROWN, AND FROM 34 TO 48 INCHES IS RED AND REDDISH YELLOW. THE SUBSTRATUM FROM 48 TO 60 INCHES IS CLAY SAPROLITE.

THE MARICAO SERIES CONSISTS OF VERY DEEP, WELL DRAINED SOILS ON UPLANDS. THEY FORMED IN MATERIAL WEATHERED FROM VOLCANIC ROCKS. TYPICALLY THESE SOILS HAVE A REDDISH BROWN CLAY SURFACE LAYER 5 INCHES THICK. THE SUBSOIL FROM 5 TO 20 INCHES IS RED CLAY. THE SUBSTRATUM FROM 20 TO 60 INCHES IS RED SILTY CLAY LOAM SAPROLITE.

Asociacion Los Guineos-Maricao, riscoso. Esta asociacion consiste de alrededor de un 60 por ciento de los suelos Los Guineos y alrededor de 40 por ciento de los suelos Maricao.

**Ma - Machuelo Clay**

THE MACHUELO SERIES CONSISTS OF VERY DEEP, POORLY DRAINED SOILS ON FLOOD PLAINS. THEY FORMED IN CLAYEY SEDIMENTS DERIVED FROM VOLCANIC ROCKS AND LIMESTONE. TYPICALLY, THESE SOILS HAVE A DARK GRAYISH BROWN CLAY SURFACE LAYER, 8 INCHES THICK. THE UNDERLYING LAYER FROM 8 TO 29 INCHES IS DARK GRAY AND GREENISH GRAY CLAY. THE SUBSTRATUM FROM 29 TO 60 INCHES IS LIGHT OLIVE BROWN AND OLIVE CLAY. SLOPES RANGE FORM 0 TO 2 PERCENT.

Machuelo arcilloso. Suelos profundos, de nivel freatico alto, mal drenados, de suave a fuertemente alcalino, de textura fina, permeabilidad lenta, capacidad de retencion de agua alta, casi planos y sin erosion. La fertilidad natural es alta. Son dificiles de trabajar debido a la plasticidad y pegajosidad de la arcilla. La escorrentia es lenta.

Nontechnical Descriptions  
Ponce Area, Puerto Rico Southern Part

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**MeF2 - Maraguez Silty Clay Clay Loam, 40 To 60 Percent Slopes, Eroded**

THE MARAGUEZ SERIES CONSISTS OF VERY DEEP, WELL DRAINED, SOILS ON UPLANDS. THEY FORMED IN LOAMY MATERIALS WEATHERED FROM VOLCANIC ROCKS. TYPICALLY, THESE SOILS HAVE DARK BROWN, SILTY CLAY LOAM SURFACE LAYERS, 6 INCHES THICK. THE SUBSOIL FROM 6 TO 12 INCHES IS BROWN AND DARK BROWN CLAY LOAM. THE SUBSOIL FROM 12 TO 21 INCHES IS DARK YELLOWISH BROWN LOAM. THE SUBSTRATUM FROM 21 INCHES TO 60 INCHES IS YELLOWISH BROWN LOAM.

Maraguez limo arcilloso lomico, 40-60 por ciento de inclinacion, erodado. Suelo moderadamente profundo a la roca volcanica blanda, bien drenado, de ligera a medianamente acido, textura moderadamente fina, muy riscoso y con permeabilidad moderada. La erosion es severa. La capacidad de retencion de agua es moderada y la fertilidad es alta. La escorrentia es muy rapida.

**MkF2 - Maricao Clay, 20 To 60 Percent Slopes, Eroded**

THE MARICAO SERIES CONSISTS OF VERY DEEP, WELL DRAINED SOILS ON UPLANDS. THEY FORMED IN MATERIAL WEATHERED FROM VOLCANIC ROCKS. TYPICALLY THESE SOILS HAVE A REDDISH BROWN CLAY SURFACE LAYER 5 INCHES THICK. THE SUBSOIL FROM 5 TO 20 INCHES IS RED CLAY. THE SUBSTRATUM FROM 20 TO 60 INCHES IS RED SILTY CLAY LOAM SAPROLITE.

Maricao arcilloso, 20-60 por ciento de inclinacion, erodado. Suelo profundo, bien drenado, muy fuertemente acido, textura fina, permeabilidad moderada, capacidad de retencion de agua alta y fertilidad baja. Suelos riscosos a muy riscosos y con erosion severa. Son dificiles de trabajar y con escorrentia rapida a muy rapida.

Nontechnical Descriptions  
Ponce Area, Puerto Rico Southern Part

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Mr - Meros Sand

THE MEROS SERIES CONSISTS OF VERY DEEP, EXCESSIVELY DRAINED SOILS ON BEACH RIDGES. THEY FORMED IN FRAGMENTS OF VOLCANIC ROCK, SEA SHELLS, AND CORAL. TYPICALLY THESE SOILS HAVE A VERY DARK GRAYISH BROWN SANDY SURFACE AND SUBSURFACE LAYERS, 14 INCHES THICK. THE SUBSTRATUM FROM 14 TO 60 INCHES IS DARK YELLOWISH BROWN, BLACK, OLIVE BROWN, AND VERY DARK GRAYISH BROWN FINE SANDY AND SAND.

Meros arenoso. Suelos profundos, excesivamente drenados, neutrales a moderadamente alcalinos, textura gruesa, permeabilidad muy rápida, capacidad de retención de agua y fertilidad baja.  
Suelo casi llano y sin erosión.

MsC - Montegrande Clay, 2 To 12 Percent Slopes

THE MONTEGRANDE SERIES CONSISTS OF VERY DEEP, MODERATELY WELL DRAINED SOILS ON ALLUVIAL FANS AND FOOTSLOPES. THEY FORMED IN SEDIMENTS DERIVED FROM VOLCANIC ROCKS. TYPICALLY THESE SOILS HAVE A DARK YELLOWISH BROWN CLAY SURFACE LAYER 6 INCHES THICK. THE SUBSOIL FROM 6 TO 10 INCHES IS DARK GRAYISH BROWN CLAY AND FROM 10 TO 24 INCHES IS DARK YELLOWISH BROWN AND GRAY CLAY. THE SUBSTRATUM FROM 24 TO 60 INCHES IS YELLOWISH BROWN AND GRAY VERY GRAVELLY CLAY.

Montegrande arcilloso, 2-12 por ciento de inclinación. Suelo profundo, moderadamente bien drenado, de medianamente ácido a medianamente alcalino, textura fina a textura gruesa, permeabilidad moderadamente baja, capacidad de retención de agua y fertilidad alta. Son difíciles de trabajar y la escorrentía es de lenta a moderada.

Nontechnical Descriptions  
Ponce Area, Puerto Rico Southern Part

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MtE2 - Morado Clay Loam, 20 To 40 Percent Slopes, Eroded

THE MORADO SERIES CONSISTS OF MODERATELY DEEP, WELL DRAINED SOILS ON UPLANDS. THEY FORMED IN MATERIAL WEATHERED FROM VOLCANIC ROCK. TYPICALLY THESE SOILS HAVE A DARK REDDISH GRAY CLAY LOAM SURFACE LAYER 7 INCHES THICK. THE CLAY LOAM SUBSOIL FROM 7 TO 17 INCHES IS REDDISH GRAY AND FROM 17 TO 24 INCHES IS BROWN, DARK BROWN, DARK REDDISH GRAY AND DARK GRAY. THE LOAM SUBSTRATUM FROM 24 TO 33 INCHES IS BROWN, DARK BROWN, DARK REDDISH GRAY AND DARK GRAY LOAM. SEMI-CONSOLIDATED VOLCANIC ROCK IS AT 33 INCHES.

Morado arcilloso lomico, 20-40 por ciento de inclinacion. Suelos moderadamente profundos, bien drenados, de ligera a medianamente acidos, textura moderadamente fina, permeabilidad moderada, capacidad de retencion de agua moderada, suelos riscosos, con erosión moderada, fertilidad alta y faciles de trabajar. La escorrentia es rapida.

MtF2 - Morado Clay Loam, 40 To 60 Percent Slopes, Eroded

THE MORADO SERIES CONSISTS OF MODERATELY DEEP, WELL DRAINED SOILS ON UPLANDS. THEY FORMED IN MATERIAL WEATHERED FROM VOLCANIC ROCK. TYPICALLY THESE SOILS HAVE A DARK REDDISH GRAY CLAY LOAM SURFACE LAYER 7 INCHES THICK. THE CLAY LOAM SUBSOIL FROM 7 TO 17 INCHES IS REDDISH GRAY AND FROM 17 TO 24 INCHES IS BROWN, DARK BROWN, DARK REDDISH GRAY AND DARK GRAY. THE LOAM SUBSTRATUM FROM 24 TO 33 INCHES IS BROWN, DARK BROWN, DARK REDDISH GRAY AND DARK GRAY LOAM. SEMI-CONSOLIDATED VOLCANIC ROCK IS AT 33 INCHES.

Morado arcilloso limoso, 40-60 por ciento de inclinacion. Suelos moderadamente profundos, bien drenados, de ligera a medianamente acidos, textura moderadamente fina, permeabilidad moderada, capacidad de retencion de agua moderada, suelos muy riscosos, muy erosivos, fertilidad alta y faciles de trabajar. La escorrentia es muy rapida.

Nontechnical Descriptions  
Ponce Area, Puerto Rico Southern Part

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MuD2 - Mucara Silty Clay, 12 To 20 Percent Slopes, Eroded

THE MUCARA SERIES CONSISTS OF SHALLOW, WELL DRAINED SOILS ON UPLANDS. THEY FORMED IN MATERIAL WEATHERED FROM VOLCANIC ROCKS. TYPICALLY THESE SOILS HAVE A VERY DARK GRAYISH BROWN CLAY SURFACE LAYER 6 INCHES THICK. THE SUBSOIL FROM 6 TO 12 INCHES IS VERY DARK GRAYISH BROWN AND BROWN CLAY. HIGHLY WEATHERED VOLCANIC ROCK IS AT 12 TO 22 INCHES SEMI-CONSOLIDATED VOLCANIC ROCK IS AT 22 INCHES.

Mucara limo arcilloso, 12-20 por ciento de inclinacion, erodado. Suelo moderadamente profundo a la roca volcanica dura, bien drenado, textura fina, permeabilidad moderada, capacidad de retencion de agua moderada, moderadamente riscoso y susceptible a erosion. Son de mediana a ligeramente acidos. La escorrentia es moderada. Son dificiles de trabajar por la pegajosidad y plasticidad de la arcilla. Son fertiles.

MuE2 - Mucara Silty Clay, 20 To 40 Percent Slopes, Eroded

THE MUCARA SERIES CONSISTS OF SHALLOW, WELL DRAINED SOILS ON UPLANDS. THEY FORMED IN MATERIAL WEATHERED FROM VOLCANIC ROCKS. TYPICALLY THESE SOILS HAVE A VERY DARK GRAYISH BROWN CLAY SURFACE LAYER 6 INCHES THICK. THE SUBSOIL FROM 6 TO 12 INCHES IS VERY DARK GRAYISH BROWN AND BROWN CLAY. HIGHLY WEATHERED VOLCANIC ROCK IS AT 12 TO 22 INCHES SEMI-CONSOLIDATED VOLCANIC ROCK IS AT 22 INCHES.

Mucara limo arcilloso, 20-40 por ciento de inclinacion, erodado. Suelo moderadamente profundo a la roca volcanica dura, bien drenado, textura fina, permeabilidad moderada, capacidad de retencion de agua moderada, riscoso y erosion moderada. Son de mediana a ligeramente acido. La escorrentia es rapida. Son dificiles de trabajar por la pegajosidad y plasticidad de la arcilla. Son fertiles.

Nontechnical Descriptions  
Ponce Area, Puerto Rico Southern Part

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**MuF2 - Mucara Silty Clay, 40 To 60 Percent Slopes, Eroded**

THE MUCARA SERIES CONSISTS OF SHALLOW, WELL DRAINED SOILS ON UPLANDS. THEY FORMED IN MATERIAL WEATHERED FROM VOLCANIC ROCKS. TYPICALLY THESE SOILS HAVE A VERY DARK GRAYISH BROWN CLAY SURFACE LAYER 6 INCHES THICK. THE SUBSOIL FROM 6 TO 12 INCHES IS VERY DARK GRAYISH BROWN AND BROWN CLAY. HIGHLY WEATHERED VOLCANIC ROCK IS AT 12 TO 22 INCHES SEMI-CONSOLIDATED VOLCANIC ROCK IS AT 22 INCHES.

Mucara limo arcilloso, 40-60 por ciento de inclinacion. Suelo moderadamente profundo a la roca volcanica dura, bien drenado, textura fina, permeabilidad moderada, capacidad de retencion de agua moderada, muy riscoso y erosivos. Son de mediana a ligeramente acidos. La escorrentia es muy rapida. Son dificiles de trabajar por la pegajosidad y plasticidad de la arcilla. Son fertiles.

**PaB - Paso Seco Clay, 2 To 5 Percent Slopes**

THE PASO SECO SERIES CONSISTS OF VERY DEEP, MODERATELY WELL DRAINED SOILS ON ALLUVIAL FANS AND TERRACES. THEY FORMED IN CLAYEY SEDIMENTS OF MIXED ORIGIN OVERLAYING LOAMY SEDIMENTS WITH GRAVEL. TYPICALLY, THESE SOILS HAVE A VERY DARK GRAYISH BROWN CLAY SURFACE LAYER 6 INCHES THICK. THE SUBSURFACE LAYER FROM 6 TO 28 INCHES IS DARK YELLOWISH BROWN. THE LAYER FROM 28 TO 32 INCHES IS DARK BROWN GRAVELLY CLAY. THE SUBSTRATUM FROM 32 INCHES TO 60 INCHES IS DARK BROWN GRAVELLY LOAM.

Paso seco arcilloso, 2-5 por ciento de inclinacion. Suelo profundo, moderadamente bien drenado, suavemente alcalinos, textura fina, permeabilidad lenta, capacidad de retencion de agua alta y fertiles. Son suavemente inclinados y sin erosion. En algunas areas hay capas de grava calcareas a 20 pulgadas de profundidad. Dificiles de trabajar por la plasticidad y pegajosidad de la arcilla. La escorrentia es lenta.

Nontechnical Descriptions  
Ponce Area, Puerto Rico Southern Part

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**PeF2 - Pellejas Clay Loam, 40 To 60 Percent Slopes, Eroded**

THE PELLEJAS SERIES CONSISTS OF VERY DEEP, EXCESSIVELY DRAINED SOILS ON UPLANDS. THEY FORMED IN MATERIAL WEATHERED FROM VOLCANIC ROCKS. TYPICALLY THESE SOILS HAVE A DARK GRAYISH BROWN CLAY LOAM SURFACE LAYER 5 INCHES THICK. THE SUBSOIL FROM 5 TO 11 INCHES IS PALE BROWN AND DARK YELLOWISH BROWN CLAY LOAM. THE SUBSOIL FROM 11 TO 15 INCHES IS DARK YELLOWISH BROWN SANDY LOAM. THE SUBSTRATUM FROM 15 TO 60 INCHES IS LIGHT BROWNISH GRAY LOAMY SAND.

Pellejas arcilloso lomico, 40-60 por ciento de inclinacion, erodado. Suelos profundos, algo excesivamente drenados, fuertemente acidos, textura moderadamente fina, permeabilidad moderadamente rapida, capacidad de retencion de agua moderada, muy riscosos y muy erosivos. La fertilidad natural es baja. La escorrentia es muy rapida.

**QeD2 - Quebrada Silty Clay Loam, 12 To 20 Percent Slopes, Eroded**

THE QUEBRADA SERIES CONSISTS OF VERY DEEP, WELL DRAINED SOILS ON SIDESLOPES AND RIDGES. THEY FORMED IN LOAMY MATERIALS WEATHERED FROM VOLCANIC ROCKS. TYPICALLY, THESE SOILS HAVE A DARK BROWN SILTY CLAY LOAM SURFACE LAYER 7 INCHES THICK. THE SUBSOIL FROM 7 TO 14 INCHES IS DARK YELLOWISH BROWN SILTY CLAY. THE SUBSTRATUM FROM 14 TO 50 INCHES IS SILTY CLAY LOAM.

Quebrada limo arcilloso lomico, 12-20 por ciento de inclinacion, erodado. Suelos profundos a la roca volcanica, bien drenados, ligeramente acidos a neutrales, textura moderadamente fina y fina, permeabilidad moderada, capacidad de retencion de agua moderada a alta, moderadamente riscosos y erosivos. La escorrentia es mediana, son fertiles. Son faciles de trabajar y necesitan practicas de conservacion de suelos si se van a cultivar.

Nontechnical Descriptions  
Ponce Area, Puerto Rico Southern Part

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**QeE2 - Quebrada Silty Clay Loam, 20 To 40 Percent Slopes, Eroded**

THE QUEBRADA SERIES CONSISTS OF VERY DEEP, WELL DRAINED SOILS ON SIDESLOPES AND RIDGES. THEY FORMED IN LOAMY MATERIALS WEATHERED FROM VOLCANIC ROCKS. TYPICALLY, THESE SOILS HAVE A DARK BROWN SILTY CLAY LOAM SURFACE LAYER 7 INCHES THICK. THE SUBSOIL FROM 7 TO 14 INCHES IS DARK YELLOWISH BROWN SILTY CLAY. THE SUBSTRATUM FROM 14 TO 50 INCHES IS SILTY CLAY LOAM.

Quebrada limo arcilloso lomico, 20-40 por ciento de inclinacion, erodado. Suelos profundos a la roca volcanica, bien drenados, ligeramente acidos a neutrales, textura moderadamente fina y fina, permeabilidad moderada, capacidad de retencion de agua moderada, riscosos y severamente erodados. La escorrentia es rapida, son fertiles. Son faciles de trabajar y necesitan practicas de conservacion de suelos si se van a cultivar.

**QeF2 - Quebrada Silty Clay Loam, 40 To 60 Percent Slopes, Eroded**

THE QUEBRADA SERIES CONSISTS OF VERY DEEP, WELL DRAINED SOILS ON SIDESLOPES AND RIDGES. THEY FORMED IN LOAMY MATERIALS WEATHERED FROM VOLCANIC ROCKS. TYPICALLY, THESE SOILS HAVE A DARK BROWN SILTY CLAY LOAM SURFACE LAYER 7 INCHES THICK. THE SUBSOIL FROM 7 TO 14 INCHES IS DARK YELLOWISH BROWN SILTY CLAY. THE SUBSTRATUM FROM 14 TO 50 INCHES IS SILTY CLAY LOAM.

Quebrada limo arcilloso lomico, 40-60 por ciento de inclinacion, erodado. Suelos profundos a la roca volcanica, bien drenados, ligeramente acidos a neutrales, textura moderadamente fina y fina, permeabilidad moderada, capacidad de retencion de agua moderada, muy riscosos y severamente erodados. La escorrentia es muy rapida, son fertiles. Son faciles de trabajar.

Nontechnical Descriptions  
Ponce Area, Puerto Rico Southern Part

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Re - Reilly Gravelly Loam

THE REILLY SERIES CONSISTS OF VERY DEEP, EXCESSIVELY DRAINED SOILS ON FLOODPLAINS. THEY FORMED IN STRATIFIED ALLUVIAL SEDIMENTS. TYPICALLY THESE SOILS HAVE A DARK BROWN GRAVELLY LOAM SURFACE LAYER 9 INCHES THICK. THE UNDERLYING MATERIAL FROM 9 TO 16 INCHES IS DARK GRAYISH BROWN VERY GRAVELLY SAND AND FROM 16 TO 48 INCHES IS COARSE SAND AND GRAVEL. SLOPES RANGE FROM 0 TO 2 PERCENT.

Reilly gravoso lomico. Suelo poco profundo a la grava o arena, excesivamente drenado, mediana a ligeramente acido, textura mediana y gruesa, permeabilidad rapida, capacidad de retencion de agua baja, suelo casi llano y sin erosion. La escorrentia es lenta y la fertilidad es baja. Las inundaciones son frecuentes especialmente durante los meses de junio a octubre. Como la permeabilidad es rapida y la capacidad de retencion de agua es baja, las plantas sufren por falta de agua la mayoria de los anos y en especial durante los meses de diciembre a abril. Son faciles de arar.

Rw - Riverwash

RIVERWASH IS A MIXTURE OF BOULDERS, COBBLES, GRAVEL, AND SAND THAT IS FREQUENTLY FLOODED.

Nontechnical Descriptions  
Ponce Area, Puerto Rico Southern Part

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Sa - San Anton Clay Loam

THE SAN ANTON SERIES CONSISTS OF VERY DEEP, WELL DRAINED SOILS ON FLOOD PLAINS. THEY FORMED IN LOAMY SEDIMENTS DERIVED FROM VOLCANIC ROCKS AND LIMESTONE. THESE SOILS HAVE VERY DARK BROWN CLAY LOAM SURFACE AND SUBSURFACE LAYERS TO 22 INCHES. FROM 22 TO 27 INCHES IS DARK BROWN LOAM. THE SUBSOIL FROM 27 TO 34 INCHES IS DARK YELLOWISH BROWN SILTY CLAY LOAM. THE SUBSTRATUM FROM 34 TO 52 INCHES IS DARK YELLOWISH BROWN OR DARK BROWN SILT LOAM AND LOAM. FROM 52 TO 60 INCHES IS DARK YELLOWISH BROWN CLAY LOAM.

San Anton arcilloso lomico. Suelos profundos, bien drenados, neutrales a moderadamente alcalinos, textura mediana a moderadamente fina, permeabilidad moderada, capacidad de retencion de agua de moderada a alta, casi planos y sin erosion. La fertilidad es alta, el contenido de materia organica es alto. La escorrentia es lenta. Estos suelos pueden ser cultivados intensivamente sin perdida de suelo. Este suelo es facil de arar.

Se - Serrano Sand

THE SERRANO SERIES CONSISTS OF VERY DEEP, POORLY DRAINED, SOILS IN COASTAL LOWLANDS. THEY FORMED IN COARSE TEXTURED SEDIMENTS. TYPICALLY THESE SOILS HAVE VERY DARK GRAYISH BROWN SAND SURFACE LAYER 4 INCHES THICK. SUBSURFACE IS VERY DARK GRAYISH BROWN SANDY LOAM. THE SUBSOIL IS DARK GRAYISH BROWN, DARK GREENISH GRAY SANDY CLAY LOAM. UPPER SUBSTRATUM IS VERY DARK GRAYISH BROWN LOAMY SAND. LOWER SUBSTRATUM TO 50 INCHES IS VERY DARK GRAY SAND. SLOPE IS 0 TO 2 PERCENT.

Serrano arenoso. Suelos profundos, mal drenados, salinos, de textura gruesa a moderadamente fina, muy fuertemente alcalinos, permeabilidad rapida, capacidad de retencion de agua lenta, casi planos y sin erosion. La fertilidad es baja. Son faciles de trabajar y la escorrentia es lenta.

Nontechnical Descriptions  
Ponce Area, Puerto Rico Southern Part

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Te - Teresa Clay

THE TERESA SERIES CONSISTS OF VERY DEEP, SOMEWHAT POORLY DRAINED SOILS ON COASTAL PLAINS. THEY FORMED IN LOAMY AND CLAYEY SEDIMENTS. TYPICALLY, THESE SOILS HAVE A DARK GRAYISH BROWN CLAY SURFACE LAYER, 6 INCHES THICK. THE SUBSURFACE LAYER FROM 6 TO 15 INCHES IS VERY DARK GRAYISH BROWN CLAY. THE SUBSOIL FROM 15 TO 23 INCHES IS BROWN CLAY. THE SUBSTRATUM FROM 23 TO 60 INCHES IS DARK GRAY SILTY CLAY LOAM, CLAY, AND SANDY LOAM. SLOPES RANGE FROM 0 TO 2 PERCENT.

Teresa arcilloso. Suelos profundos, algo mal drenados, salinos, textura fina, moderadamente fina y mediana, muy fuertemente alcalinos, permeabilidad moderada, capacidad de retencion de agua de moderada a alta, casi planos y sin erosion. La fertilidad es muy baja y la concentracion de sales es alta a traves del perfil. La escorrentia es muy lenta.

Tf - Tidal Flats

HYDRAQUENTS, FREQUENTLY FLOODED ARE VERY DEEP, VERY POORLY DRAINED SOILS ADJACENT TO THE COAST. THEY ARE FREQUENTLY FLOODED BY SEAWATER AND ARE STRONGLY SALINE. SLOPES ARE 0 TO 2 PERCENT.

Terrenos pantanosos. Los terrenos pantanosos se encuentran en los llanos costeros del area semiarida. Son areas arenosas, sin vegetacion y cubiertos periodicamente por aguas pantanosas. Algunas de estas areas estan cubiertas permanentemente por agua salada; otras solo durante mareas altas.

Nontechnical Descriptions  
Ponce Area, Puerto Rico Southern Part

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To - Toa Silty Clay Loam

THE TOA SERIES CONSISTS OF VERY DEEP, WELL DRAINED SOILS ON FLOODPLAINS. THEY FORMED IN ALLUVIAL SEDIMENTS OF MIXED ORIGIN. TYPICALLY THESE SOILS HAVE A DARK BROWN CLAY LOAM SURFACE LAYER 8 INCHES THICK. A SUBSURFACE LAYER FROM 8 TO 17 INCHES IS DARK BROWN SILTY CLAY LOAM. THE SUBSOIL FROM 17 TO 29 INCHES IS DARK YELLOWISH BROWN SILTY CLAY LOAM. THE SUBSTRATUM FROM 29 TO 43 INCHES IS DARK BROWN SILTY CLAY LOAM AND FROM 43 TO 64 INCHES IS DARK YELLOWISH BROWN CLAY LOAM. SLOPES RANGE FROM 0 TO 2 PERCENT.

Toa limo arcilloso lomico. Suelos profundos, bien drenados, ligeramente acidos, textura moderadamente fina, permeabilidad moderada y capacidad de retencion de agua de moderada a alta. La escorrentia es lenta y la erosjon es un problema. La fertilidad natural es alta y son faciles de trabajar.

TuF - Tuque Stony Clay Loam, 12 To 60 Percent Slopes

THE TUQUE SERIES CONSIST OF SHALLOW, WELL DRAINED SOILS ON UPLANDS. THEY FORMED IN GRAVELLY, PARTIALLY INDURATED LIMESTONE. TYPICALLY, THESE SOILS HAVE DARK REDDISH BROWN GRAVELLY CLAY SURFACE LAYER, 5 INCHES THICK. THE SUBSOIL FROM 5 TO 11 INCHES IS DARK RED GRAVELLY CLAY. THE LAYER FROM 11 TO 19 INCHES IS INDURATED CALICHE. THE SUBSTRATUM FROM 9 TO 24 INCHES IS STRONG BROWN GRAVELLY CLAY. FROM 24 INCHES TO 60 INCHES IS SOFT GRAVELLY LIMESTONE.

Tuque pedregoso arcilloso lomico, 12-60 por ciento de inclinacion. Suelos pocos profundos al caliche endurecido, bien drenados, calizos, de textura fina sobre piedra caliza gravosa parcialmente endurecida, permeabilidad muy lenta, capacidad de retencion de agua baja, inclinados a muy riscosos y susceptibles a erosjon. La fertilidad natural es baja y son dificiles de trabajar. La escorrentia es de rapida a muy rapida. Tienen gran cantidad de piedras en la superficie.

Nontechnical Descriptions  
Ponce Area, Puerto Rico Southern Part

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**YcB - Yauco Silty Clay Loam, 2 To 5 Percent Slopes**

THE YAUCO SERIES CONSISTS OF DEEP, WELL DRAINED SOILS ON FOOTSLOPES AND ROUNDED HILLS. THESE SOILS FORMED IN LOAMY SEDIMENTS OVERLYING SOFT LIMESTONE. TYPICALLY, THEY HAVE A VERY DARK GRAYISH BROWN, SILTY CLAY LOAM SURFACE LAYER. THE UPPER SUBSOIL IS DARK BROWN SILTY CLAY LOAM. THE LOWER SUBSOIL IS YELLOWISH BROWN LOAM. THE SUBSTRATUM IS SOFT LIMESTONE THAT TEXTURED TO LOAM.

Yauco limo arcilloso lomico, 2-5 por ciento de inclinacion. Suelos profundos, bien drenados, calizos, textura moderadamente fina, permeabilidad moderada, capacidad de retencion de agua de baja a moderada, suavemente inclinados con alguna erosjon. La piedra caliza blanda aparece de 20 a 30 pulgadas. La escorrentia es lenta.

**YcC - Yauco Silty Clay Loam, 5 To 12 Percent Slopes**

THE YAUCO SERIES CONSISTS OF DEEP, WELL DRAINED SOILS ON FOOTSLOPES AND ROUNDED HILLS. THESE SOILS FORMED IN LOAMY SEDIMENTS OVERLYING SOFT LIMESTONE. TYPICALLY, THEY HAVE A VERY DARK GRAYISH BROWN, SILTY CLAY LOAM SURFACE LAYER. THE UPPER SUBSOIL IS DARK BROWN SILTY CLAY LOAM. THE LOWER SUBSOIL IS YELLOWISH BROWN LOAM. THE SUBSTRATUM IS SOFT LIMESTONE THAT TEXTURED TO LOAM.

Yauco limo arcilloso lomico, 5-12 por ciento de inclinacion. Suelos profundos, bien drenados, calizos, textura moderadamente fina, permeabilidad moderada, capacidad de retencion de agua de baja a moderada, fuertemente inclinados con alguna erosjon. La piedra caliza blanda aparece de 20 a 30 pulgadas. La escorrentia es mediana.